

## CLAIMS

1. A beam for supporting a structural load comprising:

- (a) A planer web having a top edge, a bottom edge, a length and a thickness;
- (b) said web defining a plurality of holes proximate its top edge and a plurality of holes proximate its bottom edge;
- (c) at least two rectangular top flange pieces which are separated from said web, one of said top flange pieces being located on each side of said web adjacent said top edge;
- (d) said top flange pieces defining a plurality of holes which are aligned with the holes in said web proximate said top edge;
- (e) a plurality of fasteners which extend through the holes in said top flange pieces and the holes in said web proximate said top edge and secure said top flange pieces to said web;
- (f) at least two rectangular bottom flange pieces which are separated from said web, one of said top flange pieces being located on each side of said web adjacent said bottom edge;
- (g) said bottom flange pieces defining a plurality of holes which are aligned with the holes in said web proximate said top edge; and
- (h) a plurality of fasteners which extend through the holes in said bottom flange pieces and the holes in said web proximate said bottom edge and secure said bottom flange pieces to said web.

2. The beam of claim 1 wherein said web is a thin metal sheet.

3. The beam of claim 2 wherein said web has a thickness of between 1/8 inch and 1/2 inch.

4. The beam of claim 3 wherein said web has a height between 1 foot and 4 feet.

5. The beam of claim 1 wherein said top and bottom flange pieces are parallel strand lumber.

5 6. The beam of claim 1 wherein said top and bottom flange pieces are dimension lumber.

7. The beam of claim 1 wherein there is one of said top and bottom flange pieces on each side of said web.

10 8. The beam of claim 1 wherein there are more than one of said top and bottom flange pieces on each side of said web.

9. The beam of claim 1 wherein the holes in said top and bottom flange pieces contain counterbores.

15 10. The beam of claim 1 wherein said fasteners comprise bolts having heads which fit in the counterbores on the flange pieces on one side of said web and nuts which fit in the counterbores on the flange pieces on the other side of said web.

20 11. The beam of claim 1 where at least one hole is defined in said web between said top and bottom flange pieces.

25

30

35